

**What is the effect of full inclusion of EC students in regular Language Arts classes
on student performance in reading?**

Allan Mutambo

2005

Table of Contents

	Page
Abstract	3
Introduction	4
Statement of problem	5
Review of Literature	6
Research questions	12
Method	
Participants	12
Intervention	13
Instruments for Data Collection	14
Action Research Design	15
Procedure	16
Data Analysis	17
Implications for Sharing and Action Research Planning	17
References	19
Appendices	23
Appendix A	23
Appendix B	27
Appendix C	30
Appendix D	33
Appendix E	36
Appendix F	37

Abstract

The purpose of this action research study was to investigate the effect of full inclusion of EC students in regular Language Arts classes on student performance in reading. The study was instituted from the third week of the school and ran for an entire school year. The target population (an inclusion class of sixth graders) was identified. Data collection began with the Fall Group Reading Assessment and Diagnostic Evaluation (GRADE) test which counted as a pretest. Student scores for each school system quarterly grades were also collected. Other school system student scores were the 5th grade End of Grade (EOG) scores which were collected as a pretest for the 6th grade EOG. A preliminary check of the findings was done after the results of the Spring GRADE test, the posttest, were received. A *t* Test for non-independent samples yielded a significant difference between the means of the pretest and posttest of the GRADE test suggesting that the students' performance in reading had improved for this inclusion class. The other data showing student performance in the EOG and quarterly tests also yielded results that suggested that the students in this group experienced a significant improvement in their performance in reading. The EC sub group also showed very significant gains in reading scores on the quarterly tests. However, the EC students as a subgroup did not show any significant growth for both the GRADE and EOG scores.

Introduction

The first legislative impetus to demands for inclusive practice in regular education came with the passing of Education for All Handicapped Children act in 1975. This act was fine tuned into what we now know as Individuals with Disabilities Education Act (IDEA) with amendments in 1997. Kavale (2002) argues that inclusion was the primary goal for IDEA 97. This inclusion would lead to educational equity and the elimination of inappropriate education experienced by children with disabilities. Emphasis was placed on offering special education services to cater for the Special Education Needs (SEN) of children with disabilities as required by law. IDEA dictated that Free Appropriate Public Education (FAPE) and Least Restrictive Environment (LRE) would be the cornerstones to the attainment of the requirements of the law.

Kavale (2002) suggests that pushes for inclusion first surfaced in the “mainstreaming” movement in the late 1970s. Kaufman, Gottlieb, Agard, and Kukic (1975) cited by Kavale (2002) provided the most often quoted definition where “mainstreaming refers to the temporal, instructional, and social integration of eligible exceptional children with normal peers based on ongoing, individually determined educational planning and programming progress...” (p.3). It is clear that this definition accounts for both FAPE and LRE but it falls short because it does not address how the mainstreaming might best be accomplished (Kavale, 2002). From the outset it became apparent that the main problem in successful mainstreaming was to strike a balance between FAPE and LRE. If mainstreaming was the way to full inclusion under IDEA, it would entail that LRE could only be attained in general education settings.

The topic for this action research arises out of the researcher's experiences in the 2004-2005 school year when three of his classes at a Charlotte, NC middle school have a number of inclusion students because the school has opted for mainstreaming of all sixth grade students. The challenges he has faced as a result of inclusion prompt the pursuance of the topic. Anecdotal evidence from the researcher's own teaching experience in the first half of this school year is that he has a regular class with students who performed below grade level in reading on 5th Grade EOG (End of Grade) test. This class is a good example of an inclusive class because 11 out of 23 students are certified as learning disabled in various categories and receive EC support (part of the time only due to staffing constraints). The researcher suggests that EC students have been found to be extremely needy for the most part and that it is not always easy to attend to their needs. This sometimes leads to temper tantrums and excessive classroom disruptions. Results from reading tests administered at different times during the first semester suggest that the class as a whole (non-EC students included) has made very negligible progress in academic achievement.

Statement of the Problem

The purpose of this action research study is to investigate the effect of full inclusion of EC students in regular Language Arts classes on student performance in reading.

Review of Related Literature

The issue of education reform in which all children receive equal Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE) continues to draw mixed reviews (Gal is and Tanner, 1995). The demands of the law from Individuals with Disabilities Act (IDEA) of 1997 and No Child Left Behind Act (NCLBA) of 2002 are adding more pressure to Local Education Agencies (LEA) to implement inclusive practices in education placement. The main issue now seems to be not whether inclusive education should be provided but how to ensure that it is implemented in a feasible and effective manner resulting in educational success for all children (Baker, Wang, & Walberg, 1995).

Wholesale inclusion of EC students in regular education classes has seen many detractors because arguments advocating for full inclusion, from some key proponents for the concept such as Dunn (1968) and Christopolos and Renz (1969), are not backed by empirical evidence. Crockett and Kaufman (1999), who refer to efficacy studies conducted by Carlberg and Kavale (1980), argue that the evidence provided by the efficacy studies, suggesting that regular education classes are more beneficial to students with disabilities than special education settings, had been misinterpreted. Kavale (2002) isolates the point by close analysis and reveals that although the findings suggested that the general education setting was superior for students with MR, “the average BD/ED or LD student in special class placement was better than 61% of his/her counterparts in regular class” (pp. 301-302). Thus it is possible to raise questions about the effectiveness of full inclusion for all aspects of exceptionality. Heflin and Bullock (1999) argue that there is no empirical research in learning disabilities to support reckless full inclusion. To

this end other researchers such as Hallahan (1998) have suggested a return to individualized education. Burns, Hoagwood, & Maultsby, (1998) cited by Heflin and Bullock (1999) argue that students certified as B/ED need an individually tailored program that uses a full continuum of placement and service options if they are to be soundly prepared for post-school realities. It is the type and quality of service provided that will determine the effectiveness of an educational program and not the placement (Knitzer, Steinberg, & Fleisch, 1990). Kavale (2002) who cites Deno's (1970) "Cascade Model" argues that LRE does not support a particular setting but a continuum of placement choices. Even Council for Children with Behavioral Disabilities (CCBD) (1994) seems to support the continuum of options due to the fact that most of the available body of research is not in favor of full inclusion. Kavale's perspective has proved to be more in keeping with the intent and requirements of the law (PL 94-142) because it is the perception that has been supported in court cases (Thomas & Rapport, 1988).

Counter arguments to this perspective came in the form of the Regular Education Perspective (REI) (Reynolds, Wang & Walberg, 1987) which equated LRE with full inclusion in regular education classes. For other proponents of full inclusion the emphasis is on "normalization", which they argue will be achieved when students with disabilities are provided social and academic equality with students in the general education population (Brady, McDougall & Dennis, 1989). The REI push for full inclusion is compromised by its over simplistic arguments. Kavale (2002) identifies the following:

- “(a) students are more alike than different, so truly “special” instruction was not required;
- “(b) good teachers can teach all students; (c) all students can be provided with quality

education without reference to traditional special education categories; (d) general education classrooms can manage all students without segregation; and (e) physically separate education was inherently discriminatory and inequitable.” (p.204). This is flawed thinking because even advocate organizations for students in the B/ED category such as the Council for Children with Behavioral Disorders (CCBD) admit that B/ED students remain one of the most difficult groups to integrate into regular education (Shapiro *et al*, 1999; Knitzer, Steinberg, & Fleisch, 1990). Gosenick, George, George, and Lewis (1991) cited by Shapiro *et al* (1999) found that over 75% of 192 school districts responding in a national survey indicated that self-contained classrooms was the most prevalent placement option for B/ED students. Insisting that B/ED students do not require special consideration would be irresponsible (Slee, 2001).

Kaufman and Hallahan (1995) argue that the full inclusion movement is really selling an exclusionary and not inclusionary mindset because it is based on rejecting any alternative views. The researcher, speaking with first hand experience with B/ED students, tends to agree with Kaufman and Hallahan. One has to wonder why it would have to take legislation such as IDEA 97 to ensure that equity was guaranteed if the problem of inequality was as simple to correct as the REI suggests. In this regard, Kavale (2002) contends that special education is not a place but a process. Free and Appropriate Public Education (FAPE) for EC students will not be achieved by placement only but by the process that they are taken through. Heflin and Bullock (1999) argue that there has been too much emphasis on social gain possible in regular education when the ultimate goal of educational programming was not socialization but attainment of meaningful outcomes. Although socialization should be a byproduct of the education process it

should not be the prime directive. Heflin and Bullock (1999) argue that the purpose for education must be revisited. Findings from litigation such as Board of Education v. Rowley (1982) seem to lean towards attainment of meaningful academic achievement.

Another issue that informs the researcher's investigation of the matter of full inclusion of EC students is teacher attitudes and beliefs. On the matter of how attitudes impact inclusion, MacMillan, Gresham, & Forness (1996) argue that the difference between success and failure of inclusive enterprises resides in the attitude of the school personnel. Long (1995) suggests that regular education teachers and special education support staff should be part and parcel of planning and strategizing for inclusive reforms in education delivery. Heflin and Bullock (1999) argue that teachers, who are at the forefront of implementing the drive for full inclusion, are not the initiators of the movement. Teachers find themselves doing the 'dirty work' for administrators who will be quick to blame any failures of the intervention on teacher inefficiency. Larrivee and Cook (1979) identify three factors that shape teacher attitudes about inclusion: academic concerns; administrative concerns; and pedagogical concerns. Scruggs and Moastropieri (1996) found that a majority of teachers supported the concept of inclusion but a far smaller number were willing to include students with B/ED in their classrooms. CCBD (2002) suggests that "one of the most critical areas that needs to be addressed legislatively with respect to improving outcomes for students with EBD is ensuring that all students with EBD are taught by teachers who have sufficient and appropriate training" (p.6). One cannot expect very positive results if the teachers feel inadequate to take on the challenge that full inclusion entails.

Long (1994) argues that EC students require high degrees of support from skilled practitioners. Suggesting otherwise would not only detrimental but defeating the demands for “highly qualified” practitioners in the current amendments to IDEA 97 in S. 1248. Harvey (1996) cited by Heflin and Bullock (1999) examined perceptions and concluded that teachers favored self-contained classrooms were more appropriate than programs in regular education.

Another important consideration in implementing successful inclusion is administration and leadership. Wigle and Wilcox (1999) found that many administrators are wary of inclusion because they do not feel that they have sufficient specialized training to oversee a successful inclusive model. One area of concern appears to be how to deal with behavioral problems. Findings from a study carried out by Praisner (2003) involving principals attitudes towards full inclusion of EC students suggest that administrators got less positive feedback from students with serious emotional disturbance. Heflin and Bullock (1999) also suggest that the fear of students with B/ED is not limited to regular teachers only. This apparent fear of inclusion of students with B/ED is backed up by some litigation involving parents of students without disabilities seeking due process in the name of safety for their children placed in the same regular classrooms as B/ED students (Clyde K. v. Puyallup School District, 1994; Sacramental School District v. Rachel H, 1994).

If one were to argue that collaboration between regular teachers and special education teachers would quench the fears of regular teachers, research findings on the matters suggest the contrary (Braneau-Balderarama, 1997; Lanier & Lanier, 1996; Salend, 2001; Taylor, Richards, Goldstein & Schilit, 1997; and Wood, 1998). King-Sears

(1997) suggests that a successful inclusion model cannot do without active collaboration between regular education teachers and support staff. If the ability of those who are entrusted with the implementation of inclusive initiatives is questionable or curtailed in any way, then we run the risk of taking away one of the basic tenets of special education – individualization (Kavale, 2002; Deno, Foegen, Robinson, & Espin, 1996).

In the course of planning and implementing effective inclusion models, the target group that is expected to benefit from it, the students, might be overlooked. Lipsky and Gartner (1998) suggest that the spotlight should not only be on students with disabilities and how they will be catered for but on all students. A growing body of research suggests that the strategies of peer tutoring and co-operative learning helps increase social interaction and build self esteem (Cross & Walter-Knight, 1997).

The literature on the subject of full inclusion of EC students suggests that there: 1) is a dearth of empirical evidence suggesting that full inclusion leads to gains in academic performance ; 2) over simplistic arguments for the REI movement; 3) need to consider attitudes of teachers and administrators; 4) need to rethink teacher preparation; 5) and practical considerations. This study will address the key issue of whether inclusion of EC students will result in quantifiable educational benefit for both students with and without learning disabilities.

Research Questions

The researcher considered the following research questions:

- a) Does student performance in reading improve with inclusion for both regular and EC students?
- b) What is the attitude of both EC and non-EC students towards inclusion of EC students in regular classes?
- c) What is the attitude of regular education teachers towards inclusion of EC students in regular classes?
- d) What is the attitude of EC support teachers towards inclusion of EC students in regular classes?
- e) What is the attitude of parents of both non-EC and EC students to inclusion of EC students in regular classes?

Method

Participants

The study targeted 6th grade inclusion classes. A regular language Arts class composed of students that performed below grade level on fifth grade End of Grade (EOG) was identified. The total membership of this class was 21 with 8 of them certified as EC. In this group 6 were identified as LD and 2 as EMD. A purposive cluster sampling technique was used. Because of the qualitative nature of this study, this sampling technique was deemed most appropriate.

The average class size for regular language arts classes at the target school is 25. The target class had 38% inclusion of EC students. It is also important to note that regular

classes at the target school tend to have a higher percentage of students who have PEPs (Personalized Education Plans) and are thus supposed to receive extra supports to improve their EOG scores. Four Teachers involved in teaching 6th grade inclusion classes were asked to complete questionnaires and some of the parents of both EC and non-EC students in the class were interviewed.

Intervention

The study was instituted from the third week of the school year and ran for the entire school year. The target population (class) was identified from the master class lists. Data collection began with the Fall Group Reading Assessment and Diagnostic Evaluation (GRADE) test which served as the pretest. Four of the teachers involved were given a questionnaire to complete. The students completed a student questionnaire at end the school year samples of their work were examined out of their Language Arts folders.

Eight parents were briefly interviewed at a parent-teacher conference at the end of the first quarter. Another session of parent interviews was conducted at the end of the third quarter near the end of the school year. Teacher records were checked at the end of each quarter. There was a preliminary check of the findings at the end of the first semester after the results of the Spring GRADE test are received. The final data to be collected was the results of the 6th grade EOG test year.

Instruments for Data Collection

The effect of full inclusion of EC students in Language Arts classes on student performance in reading was determined by comparison of test score results, teacher records, classroom observations, teacher questionnaires, and parent interviews.

The students took three quarterly reading tests and the EOGs. Another test that was administered in the Fall and in Spring was the Group Reading Assessment and Diagnostic Evaluation (GRADE) test. GRADE is a group-administered test that measures individual skills for reading in the areas of pre-reading, reading readiness, vocabulary, comprehension, and oral language. It is a national norm-referenced standardized test. Interpretation of scores is in percentile ranks, standard scores, grade equivalents, stanines, and growth scale values. The researcher chose this test because it is very appropriate for this action research study as it not only provides a reading diagnostic for the students but also offers the teachers with diagnostic analyses including intervention suggestions that profile both individual and classroom strengths and weaknesses. The results of the tests were available quickly because the school has a license for the GRADE scoring and reporting software. Technical information relating to validity and reliability of the GRADE test is provided in Appendix D (pp.33-35).

The Fall GRADE test serve as a pretest and the spring test will serve as a posttest.. This evidence of student work will be important because it will provide a clearer picture of students' achievement than grades in a grade book or results of reading tests alone. The teacher survey will involve questionnaires that teachers involved with the students in this target class will complete. The items on the survey seek to elicit teacher attitudes towards the inclusion process and will make use of the Likert Scale. The parent

interview targeted parents of both EC and non-EC students. The interviews were conducted using an interview schedule with four items only. There was different schedule for students but it also had only four items. The questionnaires and interview schedules were self-generated. The teacher questionnaire was adapted from Galis and Tanner (1995).

Validity and reliability of the findings of the study will be established mainly because of the triangulation afforded by the use of different sources of data. A Triangulation Matrix that shows how sources of data will be triangulated is provided in Appendix F (p. 37).

Action Research Design

This action research study was conducted to investigate the effect of full inclusion of EC students in regular Language Arts classes on student performance in reading. This qualitative design was chosen because the topic stemmed from the researcher's concerns as a practitioner pursuing to improve his effectiveness as a regular teacher working with students in an inclusion setting and also to facilitate improvement of student performance.

Although this study yielded mostly qualitative data, quantitative data was yielded from the reading test scores. The researcher took cognizance of limitations with regard to:

- a) application of findings – sample size and scope of study did not favor generalization;
- b) time to collect data – collecting and managing data as well as engaging in active teaching could be strenuous; c) getting around teacher/school administrator suspicions –

some teacher respondents might be apprehensive about speaking out; and d) student willingness to give truthful responses in interviews.

Procedure

A 6th grade regular Language Arts class fitting the target profile was identified at the beginning of the 2004-2005 school year. The Fall GRADE diagnostic test was administered the third week of the school year. The Spring GRADE test was administered in January 2005. The quarterly reading test will be administered in October, January and March respectively. Teachers completed one questionnaire at the beginning of the school year the school year.

A sample of parents/guardians to be contacted was made and the initial interviewed carried out at the first parent-teacher conference of the year. These parents were contacted again at the end of the school year. Other data was collected using the instruments described under data collection in an on going process.

Data Analysis

A *t* test for non-independent samples was used to determine whether there will be a significant difference between the means of the pre- and posttest of the GRADE test. The probability level α for this *t* test will be set at .05 with $df = 4$. The following are the findings:

Results of the GRADE test scores

Table 1

N _o	X ₁	X ₂	D	D ²
1	2	1	1	1
2	4	5	1	1
3	3	4	1	1
4	1	2	1	1
5	2	1	1	1
6	2	3	1	1
7	2	2	0	0
8	3	3	0	0
9	1	1	0	0
10	1	1	0	0
11	4	3	1	1
12	1	1	0	0
13	1	1	0	0
14	1	1	0	0
15	2	3	1	1
16	1	2	1	1
17	3	2	1	1
18	1	1	0	0
19	2	2	0	0
20	2	2	0	0
21	3	3	0	0
N = 21			$\Sigma D = 10$	$\Sigma D^2 = 10$

The above data yielded $t = 4.36 > 2.78$ suggesting a significant difference between the pretest and the posttest scores. This indicated a positive gain in reading. The EC subgroup yielded $t = 1.22 < 2.78$ suggesting this group made no gain in performance.

Results for the End of Grade (EOG) Test

Table 2

No	X ₁	X ₂	D	D ²
1	2	2	0	0
2	0	3	3	9
3	3	2	1	1
4	2	2	0	0
5	0	1	1	1
6	2	2	0	0
7	2	1	1	1
8	2	3	1	1
9	0	1	1	1
10	2	2	0	0
11	0	1	1	1
12	2	2	0	0
13	2	2	0	0
14	0	3	3	9
15	0	2	2	4
16	0	3	3	9
17	1	1	0	0
18	2	1	1	1
19	0	3	3	9
20	2	1	1	1
			$\Sigma D = 23$	$\Sigma D^2 = 48$

The above data yielded $t = 5.48 > 2.78$ suggesting a significant difference between the pretest and the posttest scores. This indicated a positive gain in reading. The EC sub-group yielded $t = 1.92 < 2.78$ suggesting that this group made no gain in performance in reading.

Results comparing Quarterly Test 1 and 3

Table 3

No	X ₁	X ₂	D	D ²
1	32	23	9	81
2	52	43	9	81
3	46	50	4	16
4	26	18	8	64
5	36	29	7	49
6	44	36	8	64
7	38	11	27	729
8	40	38	2	4
9	40	32	8	64
10	20	38	18	324
11	32	20	12	144
12	30	36	6	36
13	22	25	3	9
14	26	32	6	36
15	42	46	4	16
16	22	36	14	196
17	44	27	17	289
18	18	27	9	81
19	32	27	6	36
20	48	39	9	81
N = 20			$\Sigma D = 156$	$\Sigma D^2 = 2400$

The above data yielded $t = 4.33 > 2.78$ suggesting a significant difference between the pretest and the posttest scores. This indicated a positive gain in reading. The EC sub-group yielded $t = 9.18 > 2.78$ suggesting that this group made a very significant gain in performance in reading.

The data about attitude yielded strong support for the inclusive setting among the students whose response to the questionnaire about preferring inclusion to a separate setting was 100% unanimous for inclusion. For the parents the interviews at the beginning of the year showed that only three of the parents out of eight interviewed had any idea that their child was going to be placed in an inclusion setting. It is interesting to

note that the other parents had no opinion for or against the placement of their children. The interview at the end of the year with the same parents suggested that the parents of EC children considered the inclusion model as having a positive impact on their children. The parents of the rest of the children were still somewhat indifferent.

The students' Language Arts folders showed marked improvement in the products of all the students through the school year. There was evidence that the products were of better quality towards the end of the year.

Implications for Sharing and Action Research Planning

The findings of this study suggest that the students' performance for the whole group did show significant growth. Although the EC subgroup did not show significant growth on the GRADE and EOG test, their significant gain as shown by the school district provided end of quarter tests suggest that this group contributed to the gains made by the group as a whole.

This study has implications for education because it contributes to the growing body of research that suggests that students with learning disabilities can thrive in inclusive settings if they are provided with the necessary scaffolding. For the class in this study they had support from an EC teacher who was their "case worker" and they had access to the resource room and staff for one period every other day. For the researcher these findings suggest that inclusion settings can be successful.

Of particular concern to the researcher was the apparent indifference observed among the parents. They did not appear well informed. To this end the researcher would recommend that parents are made more aware of the benefits of the placement of their

children. Another area of concern was the matter of teacher collaboration between regular education and EC teachers. More could be done to make the inclusion model work more efficiently – a school wide initiative with a lot of parent involvement could be the way to go. Knowledge is the key to successful collaboration.

This study had limitations because the findings can in no wise be generalized because the scope of the study did not cover a long enough period. Moreover, some of the targeted samples, like the parents and teachers, did not have enough members to yield significant data. The fact that the researcher was not at the school where the research was conducted was also a limitation because it limited close access to the daily interaction between the teachers and students involved. To this end the researcher asserts that the impact of inclusion models on student performance needs further exploration.

Finally, this being an action research project it had a particular impact on the researcher's own practice. It was a great learning experience because the researcher was able to apply ideas that worked at the research site in his new setting at a private Christian school. Insights gained from this study should go a long way in facilitating growth as a practitioner who has great interest providing quality education to diverse student populations.

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Appendix A

Elon University Application to the Committee on Human Participants in Research (CHPR) (Cover Page)

Title of the Study/Project: What is the effect of full inclusion of EC students in regular Language Arts classes on student performance in reading?

Name of Principal Investigator: Allan Mutambo Phone: (704) 544-7401

Status of Principal Investigator: Student

Address where correspondence is to be sent:

Allan Mutambo
7704 Cedar Creek Lane
Apt. 205
Charlotte. Nc 28210

If the Principal Investigator is a student, provide the following information:

Social Security #: 240-97-4244 Dept: MEd

Name & Phone # of Research Advisor: Dr. Carolyn Stuart (336) 278-5851

Name(s) and phone #s of other investigators: None

Estimated beginning date of the study: August 2004

Estimated completion date of the study: May 2005

Research being conducted for: Research project

If this research is or may be supported by a grant or outside sponsor, list name(s) of sponsors(s):

Type of review expected: Expedited
(provide original and disk)

Date Application Received by CHPR:

Body of Proposal

1. Statement of the Research Problem.

The purpose of this study is to investigate the effect of full inclusion of EC students in regular Language Arts Classes on student performance in reading. This topic is of educational significance because mainstreaming of EC students is an issue that many schools have to grapple with under the spotlight of IDEA and the NCLBA. These two acts demand successful inclusion whenever mainstreaming of students with learning disabilities is instituted.

2. Description of the Study Population, Sampling Methodology, and Specific Criteria for Selection

The participants in this study will be a 6th grade inclusion class. The researcher will ideally focus on a language Arts class composed of students that performed below grade level on fifth grade EOG and in which at least twenty percent (20%) of the students are certified EC. This suggests that a purposive cluster sampling technique will be used. These students are selected because they represent a typical regular class receiving instruction from the same teacher. Other participants will be teachers involved in teaching 6th grade inclusion classes and the parents of both EC and non-EC students in the class who will be asked to complete questionnaires.

3. Detailed Description of Research Design.

This study is an action based research project that involves the collection of data through administration of pre and posttests, observations, questionnaires, informal and formal instructional assessment measures, and End Of-Grade tests? Written consent will be obtained from appropriate administrators within the school system and from the parents of all student participants.

An extensive review of the literature on inclusion of students with learning disabilities has been conducted, and the following research questions will be investigated:

- a) *Does student performance in reading improve with inclusion for both regular and EC students?*
- b) *What is the attitude towards of both EC and non-EC students towards inclusion of EC students in regular classes?*
- c) *What is the attitude of regular education teachers towards inclusion of EC students in regular classes?*
- d) *What is the attitude of EC support teachers towards inclusion of EC students in regular classes?*
- e) *What is the attitude of parents of both non-EC and EC students to inclusion of EC students in regular classes?*

The study will be conducted during the 2004-2005 academic year. Assessment will take place at the beginning, half way, and at the end of the school year. Data will be quantified through descriptive statistics, as appropriate. Conclusions will be drawn collaboratively with a faculty research advisor and reported in a written document as part of the Advanced Licensure Portfolio, a requirement for the Master of Education degree.

4. Assessment of Risk, Risk Management, and Potential Benefit

The investigation involves no foreseeable risk to participants. The study is designed to answer research questions that are based on current educational issues, as stated above, which are of interest to the researcher. Whereas the findings will give useful information to the researcher, these will not be used in any manner to reflect negatively on the performance or professional well-being of those involved.

5. Informed Consent Procedure and Procedures for Confidentiality

The attached informed consent form will be used to obtain permission of participants for involvement in the research project. This form will be given to potential participants in information sessions within the first two weeks of the school year prior to the study at which the research plan, purpose, and procedures will be explained. Student participants will be asked to take the information packet to their parents for written consent. Confidentiality and anonymity will be guaranteed through a coding system in which individual data will be assigned a number. Reported data will be aggregated in response to the posed research questions. Data will be kept by the researcher until the end of the academic year.

6. Feedback to Participants

A letter of appreciation will be sent to each participant that will include a summary of overall findings and conclusion.

7. Statement of Compliance

To my best knowledge, the plan for this research conforms with the policies and procedures for the use of human participants at Elon University

Signature of the Primary Researcher

Date

8. Faculty Advisor Statement of Approval

This project is a requirement in the Master of Education program. Each researcher will have one research advisor.

To my best knowledge, the plan for this research conforms with the policies and procedures for the use of human participants at Elon University.

Signature of the Primary Researcher

Date

Signature of Faculty Advisor

Date

Appendix B

Elon University Consent to Participate in a Research Study

IRB Study # _____
Consent Form Version Date: _____

Title of Study: What are the effects of full inclusion of EC students in regular Language Arts classes on student performance in reading?

Principal Investigator: Allan Mutambo, (Special Education)

Elon University Department: Master of Education

Phone number: (704) 544-7401

Faculty Mentors:

- *Dr. Gerald Dillashaw, Dean of the School of Education and Course Instructor*
- *Dr. Carolyn Stuart, Faculty Advisor.*

I request permission for your child to participate in an action research study during this school year. The teacher listed above will carryout the project. The study is designed to gather information about an important educational question. The findings will benefit the teacher researcher, the students, and other teachers working with the students at the school.

Your child's participation is voluntary, and you may choose for him/her not to participate or withdraw your consent at any time. All names and information will be kept confidential, and a numbered coding system will provide anonymity for all data. You will be given a copy of this consent form and a summary of the findings following completion of the study. You may call those involved at any time if you have questions during the study.

Purpose

The purpose of this action research is to investigate the effect of full inclusion of EC students in regular Language Arts classes on student performance in reading.

The following questions will be investigated:

- a) Does student performance in reading improve with inclusion for both regular and EC students?
- b) What is attitude of both EC and non-students towards inclusion of EC students in regular classes?

- c) What is the attitude of regular education teachers towards inclusion of EC students in regular classes?
- d) What is the attitude of EC support teachers towards inclusion of EC students in regular classes?
- e) What is the attitude of parents of both non-EC and EC students to inclusion of EC students in regular classes?

Participation

All the students in the Language Arts class have been asked to participate in the study. Confidentiality and anonymity will be guaranteed through a coding system in which individual data will be assigned a number.

Research Design and Procedure

Data will be collected through informal and formal assessment measure, including the GRADE Reading Diagnostic Test, quarterly reading tests, and the End-Of-Grade tests during the school year.

Risks and Benefits

There are no apparent risks involved in your child's participation, personally or academically. The study should benefit teachers as they seek to better educational practice. You will receive no monetary compensation for your child's participation nor are there any costs. The researcher will be pleased to share the findings of this study with parents and guardians.

Privacy

No student will be identified in any report about this study. Records will be kept private and identified through a numbered coding system. Data will be kept for one school year and then disposed.

Additional Questions and Withdrawal

Appropriate written administrative permission to conduct the inquiry has been obtained by the researcher. You may contact the researcher or faculty advisor, as needed for questions, through the information provided below. You may withdraw participation at any time without penalty.

Researcher: Allan Mutambo Phone number: (704) 544-7401
Email: kanjila@AOL.com Address: 7704 Cedar Creek Lane, Apt. 205, Charlotte,
NC 28210.

This research proposal has been reviewed and approved by the Committee on Human Participants in Research at Elon University, North Carolina. If you have any questions or concerns regarding your rights as a participant, you may contact Dr. Jim Barbour, Committee Chair at 336-278-5945.

Participant's Agreement:

I have read the information provided above and agree for my child to participate in this study.

Signature of Parent

Date

Name of Child/Student

Appendix C

Consent Statement

I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I am aware that the information is being sought in a specific manner so that only minimal identifiers are necessary making confidentiality and anonymity guaranteed. I understand that the results will be given in a manner so that subjects will not be identified. I also understand potential benefits that might be realized from successful completion of this study. The results will be shared with the school administration and the participants of this study and could be used to tailor needs of all students, the teachers, and other school staff. I realize that I have the right to decline to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

NOTE: Questions or concerns about the research study should be directed to the Allan Mutambo, the researcher, at (704) 544-7401, or Dr. Carolyn Stuart, the research advisor, at (336) 278-5851. Questions about the rights of research subject can be addressed to Dr. Barry Beedle, Committee Chair of the Committee on Human Participants in Research at Elon University, North Carolina, at (336)-278-5870.

Inclusion Survey

Thus is a survey of general education and special education teacher attitudes towards the inclusion of students with disabilities into general education classrooms. The completed surveys will be collected and examined in anonymity. The demographic questions are only asked to meet research study objectives. Your time and participation in this study are greatly appreciated.

Demographics:

Please circle or check the answer that applies to you.

1. Your position with the school district:
 - a) General education teacher
 - b) Special education teacher

 2. Subjects you specialize in:
 - a) Language Arts
 - b) Math
 - c) Science
 - d) Social Studies
 - e) Other
-

PLEASE TURN OVER FOR THE SURVEY

Instructions: Please rate the following statements that indicate your attitude on a scale from 1 to 5. There is a comment section at the end of the survey to write any additional comments you have about inclusion. Circle your choice:

1 = Strongly Disagree

2 = Somewhat Disagree

3 = Neutral

4 = Somewhat Agree

5 = Strongly Agree

1. Inclusion of students with mild learning disabilities into regular classes is generally an effective strategy.

1 2 3 4 5

2. Inclusion of students with learning disabilities into regular classes can be beneficial to the other students in the class.

1 2 3 4 5

3. Students should be served in regular classes regardless of disability.

1 2 3 4 5

4. My school/district is a strong supporter of inclusive education.

1 2 3 4 5

5. Inclusion in the regular classroom will hurt the education progress of the students with learning disabilities.

1 2 3 4 5

6. Placement of students with learning disabilities into regular classrooms is often disruptive to students without disabilities

1 2 3 4 5

7. Regular education teachers are generally well equipped to effectively teach students with learning disabilities.

1 2 3 4 5

8. Students with learning disabilities actively participate with their peers without disabilities in general education classrooms.

1 2 3 4 5

9. Inclusion helps to improve social skills of students with disabilities

1 2 3 4 5

10. General education teachers and other staff are provided with enough ongoing in-service training in order to prepare them to teach students with disabilities in general education classrooms.

1 2 3 4 5

11. Students with learning disabilities appear to adapt behaviorally and academically to inclusion.

1 2 3 4 5

12. Students without disabilities accept their peers with disabilities in the general education classroom.

1 2 3 4 5

13. The special education resource room should only be used when the general education teacher cannot meet the needs of students with learning disabilities.

1 2 3 4 5

14. General education teachers are concerned that having students with disabilities in their classrooms may disrupt the education of students without disabilities.

1 2 3 4 5

15. Special education teachers and general education teachers need to collaborate in order for inclusion to be successful.

1 2 3 4 5

16. Please write any additional comments you have about inclusion.

Appendix D

Teacher Letter

**Mr. Allan Mutambo
7704 Cedar Creek Lane, Apt. 205
Charlotte, NC 28210**

August 16, 2004.

Dear Colleague,

I am currently working on a Master's degree in Special Education at Elon University. As part of my graduate studies I am required to carryout an Action Research study. I have chosen to investigate the effect of full inclusion of students with learning disabilities in regular Language Arts classes on student performance in reading. Through this study I hope to get some insights on how teachers, students, and parents/guardians might work together to attain successful and effective inclusion.

I would like to encourage you to participate in this study by completing the questionnaire and providing records of the progress that the students in inclusion classes are making. I will also be requesting your permission to make some classroom observations during the course of the study. All students' and teachers' names will be withheld from the study in order to maintain confidentiality and anonymity.

The school district and the administration of Quail Hollow Middle school have approved this study. This study has also been approved by the Committee on Human Participation in Research at Elon University.

I will be pleased to share the results of this study with you. The findings should be available in May 2005. If you agree to allow your child to participate in the study, please sign the attached consent form.

If you have any questions or concerns about the study, please do not hesitate to contact me by phone or email at (704) 544-7401 or kanjila@AOL.com.

Very sincerely,

Allan Mutambo.

Appendix E
Validity and Reliability Information for the GRADE Test

TECHNICAL INFORMATION		
Standardization		
Description	Two standardizations took place. Spring standardization included preschool through twelfth-grade students at 122 sites nationwide, using the 11 GRADE levels. The same material was used for Fall standardization, which also included postsecondary students at 12 additional sites. The standardization edition of GRADE included 16 subtests and a total of 2,290 items.	
Date	2000	
Size	16,408 in Spring; 17,024 in Fall	
Sample		
Sample controlled for:		
	Females	Males
Age/Gender	14 grade-enrollment groups in Spring totaling 8,319; 15 grade-enrollment groups in Fall totaling 8,721	14 grade-enrollment groups in Spring totaling 8,089; 15 grade-enrollment groups in Fall totaling 8,303
Race	African American: 17.5% (U.S. 15.3%) Hispanic: 15.5% (U.S. 14.9%) White: 63.5%; (U.S. 64.7%) Other: 3.5% (U.S. 5.1%)	
Geographic region	Northeast: 16.0% Spring; 18.5% Fall (U.S. 18.2%) North Central: 19.9% Spring; 24.1% Fall (U.S. 23.4%) South: 42.6% Spring; 40.8% Fall (U.S. 34.4%) West: 21.5% Spring; 16.7% Fall (U.S. 23.7%)	
SES/Participation in Free-Lunch Program	The percentage of enrollment at GRADE sites qualifying for the free-lunch program was used to indicate socioeconomic status. Very low (0–10%): 16.4% (U.S. 16.1%) Low (11–20%): 14.8% (U.S. 23.9%) Moderate (21–30%): 20.5% (U.S. 21.4%) High (31–50%): 21.3% (U.S. 24.0%) Very high (51+%): 21.3 (U.S. 14.6%)	
Community type	Urban: 57.0% Spring; 49.5% Fall (U.S. 53.3%) Suburban: 18.4% Spring; 20.1% Fall (U.S. 18.4%) Rural: 24.6% Spring; 30.4% Fall (U.S. 28.3%)	
Special populations included	Students receiving special education services were included if they were mainstreamed for part or all of the regular education day. GRADE was administered to 242 students independently identified as being dyslexic and to 191 students identified as	

	learning disabled in the area of reading.
Special populations included	Students receiving special education services were included if they were mainstreamed for part or all of the regular education day. GRADE was administered to 242 students independently identified as being dyslexic and to 191 students identified as learning disabled in the area of reading.
Reliability	
<i>Internal reliability</i>	Mostly in the .95 to .99 range
<i>Alternate form</i>	.81 to .94, with half being .89 or higher (for a sample of 696 students)
<i>Test-retest</i>	.77 to .98, with a median of .90 (for a sample of 816 students)
Validity	
Content	See Chapter 2 of the Technical Manual for the 191 students identified as being dyslexic and to 191 students identified as learning disabled in the area of reading manual.
Criterion-related	<p>Concurrent</p> <p>Iowa Test of Basic Skills Total Reading scores with GRADE Total Test scores for 185 students: Correlations from .69 to .83.</p> <p>California Achievement Test Total Reading scores with GRADE Total Test scores for 119 students: Correlations from .82 to .87</p> <p>Gates-MacGinitie Reading Tests Total scores with GRADE Total Test scores for 313 students: Correlations from .86 to .90</p> <p>Peabody Individual Achievement Test-Revised General Information, Reading Recognition, Reading Comprehension, and Total Reading scores with GRADE Vocabulary, Comprehension Composite, and Total Test for 30 students: Correlations from .47 (for General Information) to .80 (for Total Reading) with a median of .74</p> <p>Predictive</p> <p>TerraNova Standard Scores with GRADE Total Test scores for 232 students in Grades 2, 4, & 6: Correlations from .76 to .86</p>
Construct	<p>See Chapter 2 in Technical Manual for theoretical underpinnings of test items</p> <p>Convergent</p> <p>Peabody Individual Achievement Test-Revised General Information scores with GRADE Total Test scores for 30 students: Correlations from .47 to .64</p> <p>Iowa Test of Basic Skills Reading scores with GRADE Total Test scores for 118 students: Correlations from .75 to .83</p> <p>Divergent</p> <p>Peabody Individual Achievement Test-Revised Total Reading scores with GRADE Total Test scores for 30 students: Correlations from .74 to .80</p> <p>Iowa Test of Basic Skills Math Computation scores with GRADE Total Test scores for 118 students: Correlations of .53 and .54</p> <p>Progression of GRADE Scores</p> <p>Growth curves show developmental changes in pre-reading and reading ability based on GRADE w-ability scores and grade</p>

	<p>enrollment. The curves illustrate a continuous growth in reading from fall to spring of one grade level to the next as measured by the 11 GRADE levels.</p> <p>Special Population Studies</p> <p>Dyslexia: Differences in means between the dyslexic and control groups of 242 students of 7.7 to 18.7</p> <p>Learning Disability (Reading): Differences in means between the LD and control groups of 191 students of 9.8 to 15.2</p>
Other	
Developmental history	National tryout: February–May 1999 Standardizations: Spring and Fall 2000
Special features	Group administration and diagnostics Technical Manual includes extensive information for interpretation.
Federal mandates met	Can be used to chart progress/growth in reading across grade levels, as required by IDEA
Adaptation of special needs	No time limits; tests can be given out of level Levels P & K can be administered with student just pointing to response.

Appendix F

Parent Letter

**Mr. Allan Mutambo
7704 Cedar Creek Lane, Apt. 205
Charlotte, NC 28210**

August 16, 2004

Dear Parent/Guardian,

I am currently working on a Master's degree in Special Education at Elon University. As part of my graduate studies I am required to carryout an Action Research study. I have chosen to investigate the effect of full inclusion of students with learning disabilities in regular Language Arts classes on student performance in reading. Through this study I hope to get some insights on how teachers, students, and parents/guardians might work together to attain successful and effective inclusion.

I would like to encourage you to allow your child to participate in the study. The study will involve the completion of regular classroom activities and assignments. There will be no additional assignments for your child. Information from observation of the teaching/learning process, quarterly reading test scores, student reading grades, EOG test scores, student portfolios, teacher surveys, student interviews, and parent surveys will be used to gauge student progress. All students' names will be withheld from the study in order to maintain confidentiality and anonymity.

The school district and the administration of Quail Hollow Middle school have approved this study. This study has also been approved by the Committee on Human Participation in Research at Elon University.

I will be pleased to share the results of this study with you. The findings should be available in May 2005. If you agree to allow your child to participate in the study, please sign the attached consent form.

If you have any questions or concerns about the study, please do not hesitate to contact me by phone or email at (704) 544-7401 or kanjila@AOL.com.

Very sincerely,

Allan Mutambo.

Participant's Consent

I have read the information above and give consent to my child to participate in the study.

Parent's/Guardian's Signature

_____/_____/_____
Date

Appendix G

Triangulation Matrix

Area of Enquiry: Full Inclusion of EC students in Language Arts Regular Classes

Research Questions	Data Source # 1	Data Source # 2	Data Source #3
Does student performance in reading improve with inclusion for both regular and EC students?	Analysis of GRADE test scores	Analysis of EOG test scores	Student quarterly progress reports and portfolios
What is the attitude of both EC and non-EC students towards inclusion of EC students in regular classes?	Student interviews	Classroom observations	Student writing responses
What is the attitude of regular education teachers towards inclusion of EC students in regular classes?	Teacher Surveys	Teacher interviews	Teacher records
What is the attitude of EC support teachers towards inclusion of EC students in regular classes?	Teacher Surveys	Teacher interviews	Teacher records
What is the attitude of parents of both non-EC and EC students towards inclusion of EC students in regular classes?	Parent interviews	Parent Survey	Parent to teacher contact log